

# DES Telematics Pilot Program Proposal – Pilot period to be determined

Project Sponsors: Chris Liu (DES Director), Bob Covington (DES Deputy Director), and Phil Grigg (DES Assistant Division Manager)

## **Pilot Scope and Desired Outcome**

The intent of this project is to provide a cost/benefit analysis associated with the statewide implementation of fleet telematics program. The analysis should provide, in detail, safety and cost avoidance projections through; reduced fuel consumption, automated annual reporting of GHG and emissions, underutilization reporting, exception reporting, improved driver behaviors towards increasing miles per gallon (MPG), engine diagnostic and MIL codes reporting, monthly mileage reporting integration with Asset Works Fleet Management system, and maintenance cost reductions.

## **Recommended Vehicle Sample Size and Pilot Period**

- 350 total vehicles
- Six (6) month trial period
- Sample size provides a 95% confidence level in the results, based on a 3,500 vehicle fleet
- Six months will give us an accurate dataset by incorporating the historically busy spring months
- DES Fleet Operations will coordinate the placement of the pilot Network Fleet systems in vehicles encompassing broad range of
  vehicle applications, over a statewide geographical area. This approach will provide a good sample set of data points for vehicles
  with varying duty cycles.
- Installation of in-vehicle boxes
- DES and Network Fleet will coordinate the statewide installation

Customer Agency	Current # of vehicles on monthly leases	Proposed Pilot Vehicle Count
SOCIAL AND HEALTH SERVICES	851	102
LABOR AND INDUSTRIES	406	49
ECOLOGY	357	43
DEPT OF FISH AND WILDLIFE	308	37
DES Daily Rental Fleet	251	30
AGRICULTURE	189	23
LIQUOR CONTROL BOARD	136	16
CORRECTIONS	119	14
DEPARTMENT OF ENTERPRISE SERVICES	113	14
ATTORNEY GENERAL	104	13
LICENSING	76	9

- Top 10 DES Managed fleets + DES Daily rental vehicles + CMS/Surplus/B&G ( These customers account for 80% of DES's total fleet)
- 9-102 vehicles per agency set proportional to agency fleet size
- Mix of hybrids, light duty SUVs, medium and light duty trucks, delivery vehicles (CMS, Surplus, DSHS)
- Install in vehicles located statewide to gather information on all geographical travel areas
- Vehicles with 12 months of usage data establish *benchmark data*
- Vehicles less than 4 years old –avoiding possible replacement candidates

## **Measurable Metrics:**

- Improvements to employee safety
- Accident Management cost savings
- Miles traveled vs. each vehicles previous year's benchmark data
- Fuel consumption reduction in gallons vs previous year benchmark Results WA Goal 5 Measurable
- MPG comparison vs. previous year
- Underutilization backup documentation
- MMT of carbon conversion for RW reporting
- Social Cost of Carbon (SCC) reduction
- Reduction in Idle time
- Cellular vs Satellite connectivity requirements look to geo-fence areas with poor or no cell reception
- FTE touch time saved through telematics end of month mileage reporting
- Customer complaints and associated vehicle location backup

#### Pilot Costs:

Pilot Costs - (Install of 350 units and Service Fee for 6 months)	
Number of Vehicles	350
Length of pilot in months	6
Monthly Service Fee/per vehicle (WSCA Pricing for Verizon Contract)	\$0.00
Cost Per Box - Plus pigtail - No Charge during the pilot	\$0.00
Install Per Unit	\$0.00
Install Cost	\$0.00
Monthly Service Fee for # of months listed above	\$0.00
Total Pilot Cost	\$0.00

## Verizon Networkfleet Cost Structure (3,500 vehicles)

Full Implementation Cost (Procure via WSCA)	
Cost Per Box	\$85.00
Light Duty Harness plus OBII Adaptor Kit (Per/Veh)	\$35.00
Per Month Service Fee (per month)	\$19.95
Asset Work Integration (TBD)	\$5.00
Install Cost per box (Verizon Tech)	\$65.00
DES Vehicle Count	3,500

Install Cost (Start-up)	\$647,500.00
Monthly Operating Cost	\$87,325.00
Annual Operating Cost	\$1,047,900.00

1st Year Start Up Cost + Annual Maint.	\$1,695,400.00
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#### **Union Partnership**

- Letter of intent was sent by DES HR to Unions 3/10/2015
  - $\circ$  We received five Demands to Bargain. All obligations were met by June 15, 2015
- Identity Union and HR Liaison contacts (WSFE, WPEA, etc...) within each of the 10 customer agencies.

#### **Communication and Transparency Plan**

- Schedule stakeholder meeting to review the intent of the pilot, benefits to agencies, and provide a forum to answer questions.
- DES will send a communication to agency drivers of pilot vehicles by email, but with an available WebEx event
- Union representation and agency customer HR contacts will be included.

## **Annual Fuel Reduction Estimates**

- Figures based on CY14 fuel spend of \$5,747,502.00
- Estimates at various % points, with a conversion to metric tons of carbon equivalent and social cost of carbon at \$67.00 per/MMT

%	Fuel Cost Reduction	Approx. Gallons (\$3.50 gallon CY14)	Equivalent Metric Tons of Carbon (MMT)	Social Cost of Carbon (SCC) (at \$67/MMT)	Total Saving
5%	\$287,375	82,107	730	\$48,910.00	\$336,285.00
10%	\$574,750	164,214	1,460	\$97,820.00	\$672,570.00
20%	\$1,149,500	328,428	2,920	\$195,640.00	\$1,345,140.00
30%	\$1,724,250	492,642	4,380	\$293,460.00	\$2,017,710.00
40%	\$2,299,000	656,857	5,839	\$391,213.00	\$2,690,213.00

# Training

- Train DES Fleet Operations Admin, Vehicle Maintenance, and Statewide Maintenance Coordinators. Network Fleet
- Train contacts within each customer agency to act as a POC during the pilot. DES Fleet Operations staff
- Reports training will include all items listed in the Measureable Metric sections.

#### Thank you,

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